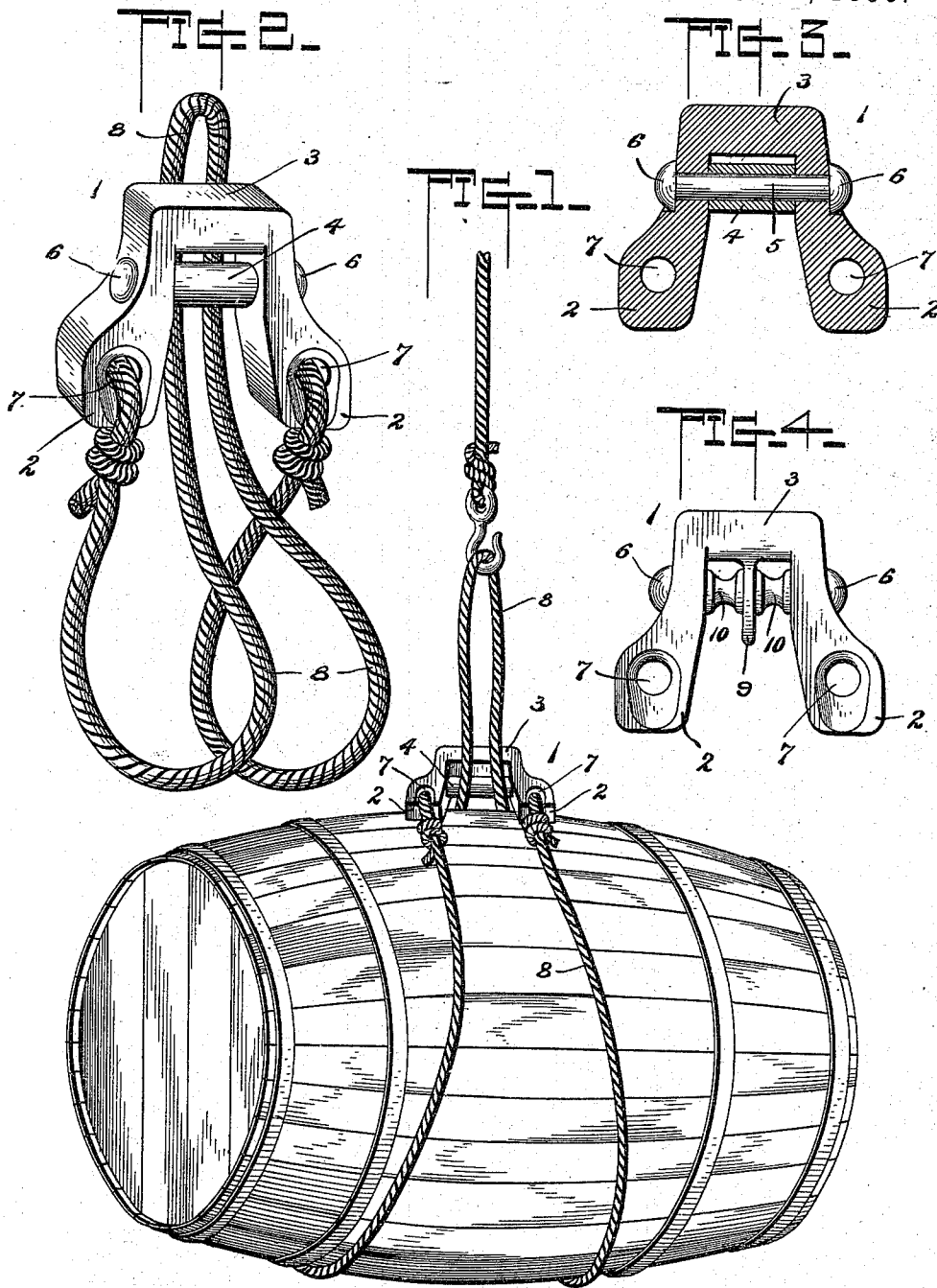


(No Model.)

F. THOMPSON.
SLING PULLEY.

No. 573,248.

Patented Dec. 15, 1896.



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UNITED STATES PATENT OFFICE.

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SLING-PULLEY.

SPECIFICATION forming part of Letters Patent No. 573,248, dated December 15, 1896.

Application filed September 14, 1896. Serial No. 605,843. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN THOMPSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sling-Pulleys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to sling-pulleys and is designed to facilitate the raising and lowering of heavy articles, such as barrels, crates, packages, and merchandise in general.

The object of the invention is to provide a cheap, simple, and efficient pulley-block to be used in connection with the ordinary rope sling and to form, preferably, an attached part thereof, the device being so constructed as to hold the loops of the rope apart or at a distance from each other, thereby obtaining a better purchase upon the article being lifted or lowered and preventing the tendency of such article tipping and becoming displaced from the sling. The sling is thus more reliable and satisfactory in its practical working, and on account of the roller or sheave with which the block is provided the placing of the sling around the article or package is expedited, there is a reduction in the wear and abrasion of the rope, and the necessity of beating down the loop portion of the ordinary sling obviated.

Other objects and advantages of the invention will appear in the course of the subjoined description.

The invention consists in a sling-pulley embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims hereto appended.

In the accompanying drawings, Figure 1 is a perspective view showing the improved sling-pulley in use and applied to a barrel ready for hoisting. Fig. 2 is an enlarged detail perspective view of the sling-pulley *per se*. Fig. 3 is a sectional view of the same. Fig. 4 is a side elevation showing a modification in the form of the pulley-block, &c.

Like numerals designate like parts in the several figures of the drawings.

Referring to the drawings, 1 designates the pulley-block, which is substantially U-shaped, the arms 2 of the block diverging from the connecting portion 3 toward their extremities, so as to form an inwardly contracting or tapering throat comprised between said arms and adapted to draw the loops of the sling-rope toward each other and guide them to the sheave, (indicated at 4.)

Adjacent to the connecting portion 3 of the block the inner opposing sides of the arms 2 are parallel, so as to form flat abutting and bearing surfaces for the opposite end of a cylindrical sheave or pulley 4, which is journaled on a pin or bolt 5, passing transversely through the arms 2 and headed, as at 6, outside of said arms or otherwise secured. It is preferred to form partial recesses in the outer surfaces of the arms for the heads 6 and to secure the pin or bolt permanently, as shown, but of course the pin or bolt may be provided with a removable nut, if so desired, so that it and the sheaves may be taken out for repairs, if necessary, or to replace the sheave when worn out.

The extremities of the arms 2 are thickened and each provided with an eye 7 to receive the ends of the sling-rope 8. The holes at their end portions are made flaring or splayed for preventing abrasion of the rope, and the ends of the rope are passed through said openings and knotted to prevent their withdrawal, or they may be tied around the ends of the arms, as shown, or fastened to said arms in any convenient manner. It is preferred to employ a single piece of rope and to fasten the opposite ends thereof to the arms of the block, as described, thus leaving the central portion of the rope to pass between said arms and bear on the sheave 4.

In operation the sling-rope is passed around the articles or packages to be hoisted, and the central or loop portion of the rope is inserted between the arms 2 from the side next to the article. The rope is then drawn back and away from the article, thus forcing the pulley-block down with considerable pressure against the article to be hoisted. The sheave 4 greatly assists in the tightening of the sling around the article, as it obviates the friction of the rope upon itself. The rope is then attached to the hook of the haul

or hoisting rope, as shown in Fig. 1, and the object may then be lifted with perfect safety. The spacing of the arms 2 at a considerable distance apart separates the loops of the sling-rope and affords a greater spread of the sling as a whole and obviates the tipping or careening of the article in the sling, making it almost impossible for it to become loose and displaced. By providing the sheave 4 it is unnecessary to employ a man to beat down the central or loop portion of the ordinary sling-rope against the article, as the block of this invention will automatically travel along the rope until it bears firmly against the article, thus saving time, labor, and expense. If desired, the opposite sides of the block and its arms may be made concaved, so as to conform more nearly to the exterior contour of the objects lifted.

20 In Fig. 4 I have shown the block as having a central tongue or divider 9 projecting from the connecting portion 3 centrally into the throat between the arms 2 and having two sheaves 10 arranged one at each side of said tongue. This insures the proper disposition of the loops of the sling-rope and prevents the same becoming crossed and wearing upon each other and also keeps said loops farther apart, the desirability of which is explained

30 hereinabove.

The appliance is simple, cheap, and effective, and may be constructed of any desired or preferred material. Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, I claim as new—

40 1. A pulley-block comprising spaced diverging arms, united by a connecting portion at one end in combination with a sheave

journaled between said arms intermediate said connecting portion and the free ends of the arms, and a rope having its ends fastened in the eyes at the extremities of said arms, substantially as described. 45

2. A substantially U-shaped pulley-block having spaced arms and a tapering and inwardly-contracting open throat, in combination with a sheave journaled between said arms and located in said throat, and a rope having its ends fastened to the ends of said arms substantially as described. 50

3. A substantially U-shaped block having spaced arms, and a tapering and inwardly-contracting open throat an intermediate tongue projecting between said arms, and terminating in the open throat and sheaves journaled at each side of said tongue between the arms, substantially as described. 55

4. A substantially U-shaped block having spaced arms each provided at its extremity with an eye, in combination with a cross pin or bolt passing through said arms, a sheave 65 journaled on said pin or bolt, and a sling-rope having its ends fastened in said eyes, substantially as described.

5. A pulley-block having spaced arms the inner adjacent sides of which diverge toward their extremities to form a tapering and inwardly-contracting throat, the opposing inside faces of the inner ends of the arms being parallel, in combination with one or more sheaves arranged between said arms, and a rope having its ends connected to the extremities of said arms, substantially as described. 70

In testimony whereof I affix my signature in presence of two witnesses.

FRANKLIN THOMPSON.

Witnesses:

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HENRY A. TRESHAM.